



2006 Governor's Conference: Pandemic Influenza and Business Preparation

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Pandemic not just a “Plandemic”

Media

Bureaucrats

Everybody
else?

P

Plandemic, n.

An uncontrolled outbreak of planning triggered by identification of plausible new ways to die.

Main symptoms: desire to hold press-conferences, followed by either mass inoculation or compulsive stockpiling.

OH MY GOODNESS
WE COULD ALL
DIE !

WE NEED TO WRITE
AN **ACTION PLAN** WITH
TRIPLE REDUNDANCY
CONTINGENCY MEASURES.

WHAT TO
HAVE FOR
LUNCH ??



The best way to avoid being embroiled in a plandemic is to stand aside and graciously permit more worried people to do the work.

Pandemic Planning is Relevant to Every Business

- **Worldwide epidemics (“pandemics”) of influenza are natural – timing and severity are unpredictable**
- **Business activities will be affected by:**
 - The disease itself
 - Control measures to reduce impact of disease
- **General business contingency plans for disaster mitigation and recovery also need to address unique nature of pandemics**
- **A failure to plan for a pandemic could create legal liability in the event of severe service disruption**

Objectives

- **Review:**
 - Nature of influenza
 - Assumptions about pandemics
 - Update on Asian H5N1 “Bird Flu”
- **Describe the range of activities planned to deal with a pandemic at the state level**
- **Provide practical suggestions on how businesses might prepare to mitigate effects**



The Nature of Influenza Viruses

- **Many different kinds of influenza viruses infect a variety of animals (most infect birds)**
- **Only a few types circulate among people**
- **When a new strain spreads among humans → pandemic**
 - **10 times in the last 300 years**
 - **Larger proportion of deaths at younger ages**



The Nature of Influenza Viruses: How they Spread

- **Human influenza typically spreads by:**
 - **Close contact (<6 feet) with a sick person who is coughing or sneezing, or**
 - **Touching a surface contaminated by infected respiratory secretions and touching mouth, nose or eyes**
 - **Children are especially effective spreaders**

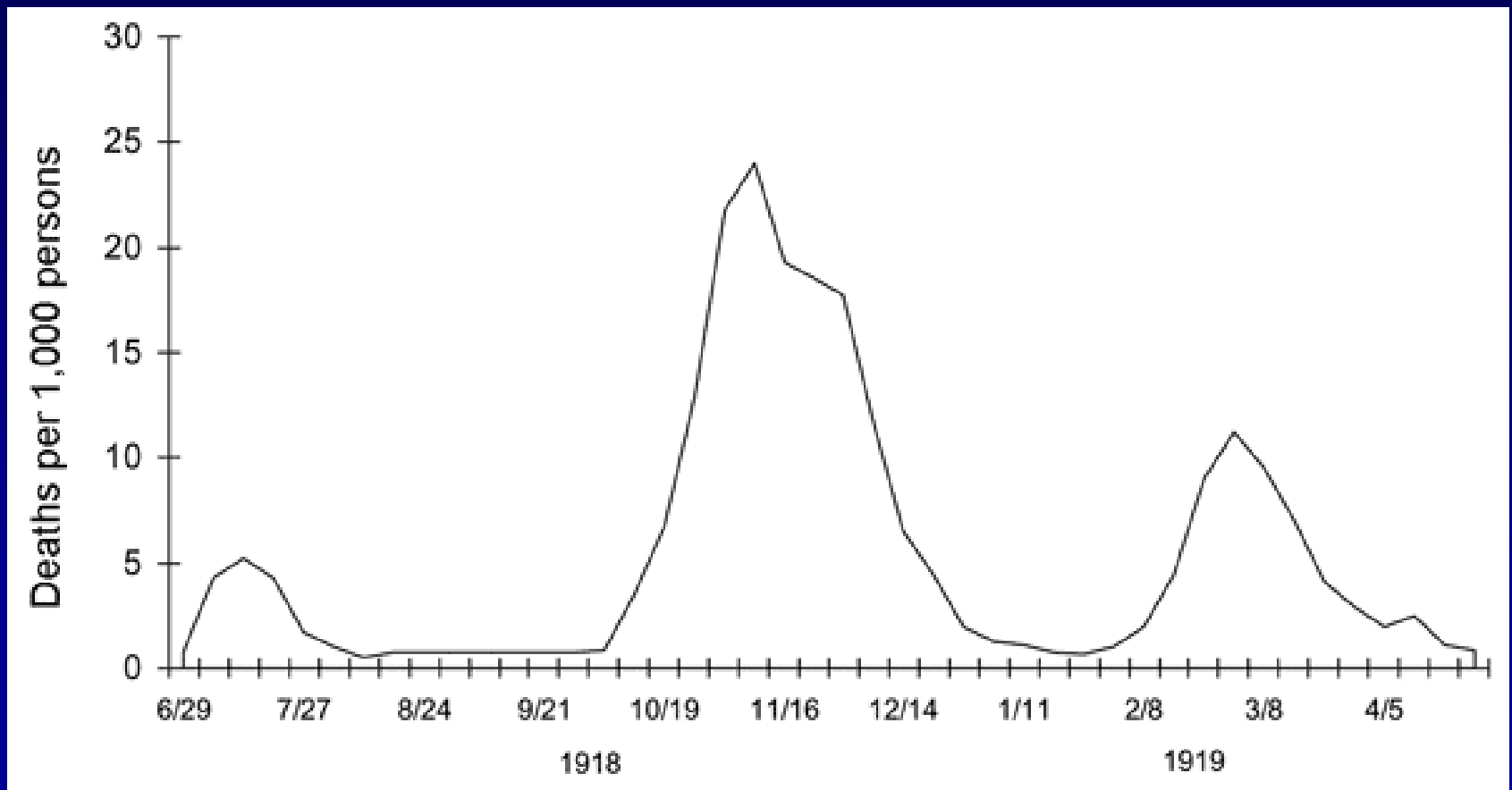
Assumptions about Pandemic Influenza Transmission (1)

- No one is immune
- About 30% of people will become ill
- Most will become ill about 2 days after exposure
- People are most contagious the first 2 days of illness
 - Sick children are more contagious than adults
- On average, each ill person would infect 2 or 3 others (if no precautions are taken)

Assumptions about Pandemic Influenza Transmission (2)

- **Pandemics cause the number of cases in a community to rise sharply and fall in 6-8 week waves**
- **2-3 “waves” of varying severity are separated by weeks or months of no activity**
- **The total pandemic period will last 1-2 years**

Influenza Waves, United Kingdom, June 1918 – May 1919



Medical Burden of a Future Pandemic in Tennessee (HHS Plan Estimates)

Characteristic	Moderate	Severe*
Illness (30%)	1.8 million	1.8 million
Outpatient Care	900,000	900,000
Hospitalization	17,300	198,000
ICU Care	2,575	29,700
Mechanical Ventilation	1,300	14,850
Deaths	4,180 (0.2%)	38,060 (2%)

*HHS recommends that states plan for severe scenario

Social and Economic Assumptions (during pandemic period):

- **Absenteeism**
 - At the peak of a 6-8 week wave, ~40% of employees may be absent because of illness, fear or to care for a sick family member
- **Congressional Budget Office estimates a global business recession (~5% decline in GDP) in a severe pandemic**
- **Disruption of supply chains expected**
- **Communities should not plan to rely on outside help because of widespread impact**



H5N1 Avian Influenza (Bird Flu)

- **Not a pandemic virus: a lethal bird virus that rarely causes human illness**
- **H5N1 first caused illness in people in Hong Kong 1997**
- **>240 confirmed human cases, more than half fatal, most cases have been younger than 40 years**
- **Migratory birds and bird trade help spread H5N1**
- **The US bans import of birds or poultry products from affected countries and has increased screening of wild birds**
- **Standard biosecurity measures of US poultry industry minimize risk to commercial flocks**

Differences in biosecurity



Vietnamese farmer with flock crosses the road



Dutch chicken house – no chance for wild birds to mingle



Will H5N1 become the next pandemic?

- **H5N1 activity unprecedented and worrisome among birds, though US poultry industry well prepared for avian influenza threats**
- **Impossible to know if it will mutate to easily spread among people and trigger a pandemic**
- **If not H5N1, then other flu viruses have the potential to cause a pandemic**
- **The prudent time to plan is now**

The Objectives of Federal and State Pandemic Planning and Response

Primary objective

- Minimize sickness and death**

Secondary objective

- Minimize societal and economic disruption**

State Pandemic Response Plan

- 2006 state plan reflects new federal guidelines
- Designed to respond to severe pandemic with resources currently available
- Framework of standard policies for a consistent statewide response
- Operational details are in local plans currently under development by regional health departments
- Organized as a core with 9 operational sections

Operational Sections

- **Section 1: Ethical Principles**
- **Section 2: Disease Surveillance**
 - Sentinel Provider Network
- **Section 3: Laboratory**
 - State laboratory able to test for bird flu
- **Section 4: Hospital Planning**
- **Section 5: Vaccine**
 - Federal priorities to be determined
 - Current production capacity 0.5% pop/month, research underway to improve this

Operational Sections

- **Section 6: Antiviral medications**
 - Effectiveness and optimal dose still unknown
 - Top priority for antivirals will be hospitalized patients
- **Section 7: Community Interventions (to return)**
- **Section 8: Communications**
 - Critical principles are consistency, timeliness, accuracy

Health officials in Thailand communicate: “It’s safe to eat chicken!”

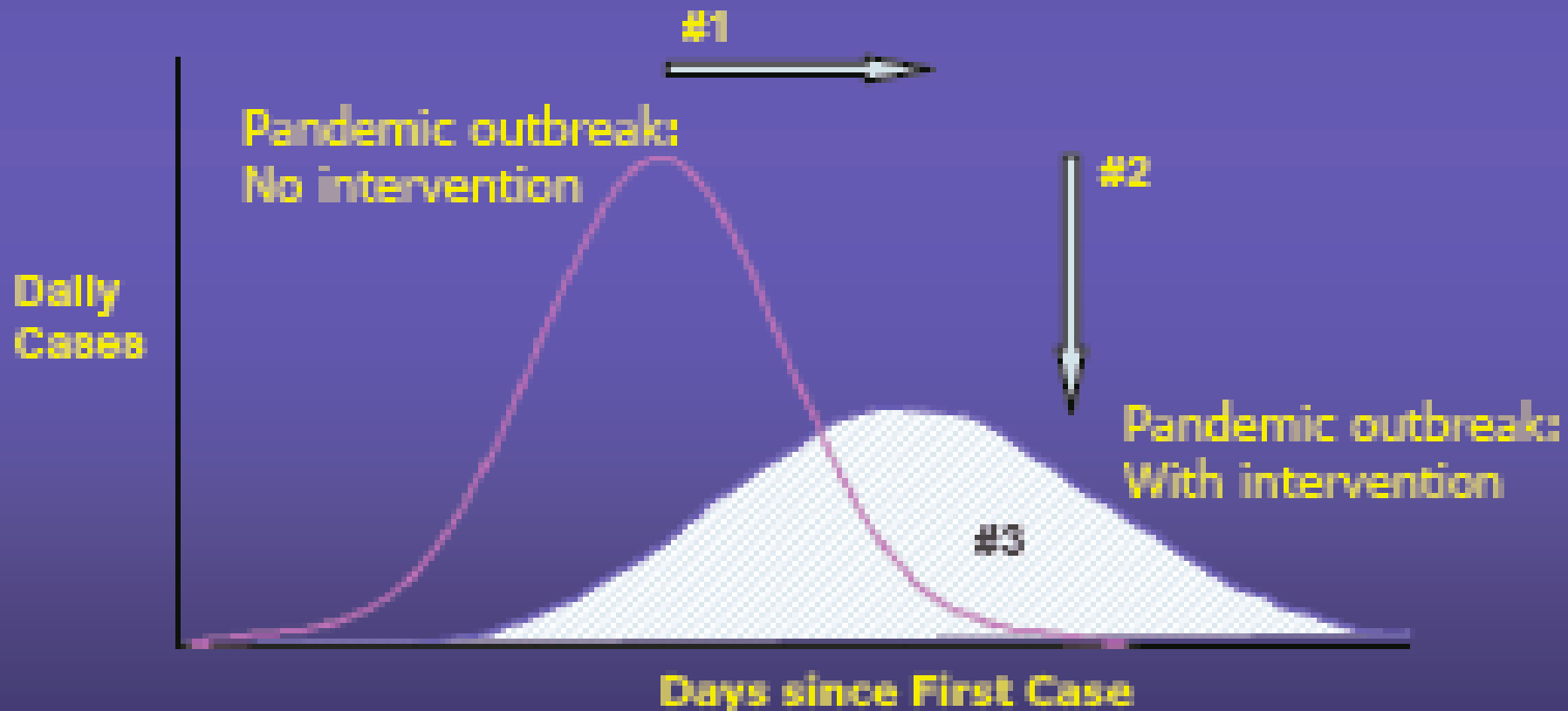


Operational Sections

- **Section 9: Psychosocial support**
 - **Expect stress and disruption in social activities**
 - **Plan to facilitate access to local support services (child and elder care, food, spiritual support)**

Community-Based Interventions

1. Delay disease transmission and outbreak peak
2. Decompress peak burden on healthcare infrastructure
3. Diminish overall cases and health impacts



Section 7: Community Interventions

- **Objective is to interrupt nodes of intense disease transmission in a severe pandemic**
- **Major interventions decided by Commissioner of Health in consultation with Governor**
- **First step: pandemic anywhere in US**
 - **Consider suspension of very large (>10,000 person) discretionary gatherings**

Section 7: Community Interventions

- **During local pandemic wave:**
 - **Schools K-12 and daycares >13 children close until wave ends**
 - **Consider suspending >100 person discretionary public gatherings**
 - **Federal authorities may recommend voluntary 1-week quarantine for household members of ill persons (high likelihood they will fall ill)**

Business Planning

- Designate person(s) responsible for business contingency planning in three major areas:
 - Impact on business travel
 - Impact on supply and distribution chains
 - Local pandemic effects on workplace
- Develop continuity plans consistent with government policies
 - Federal resources at www.pandemicflu.gov
 - State Pandemic Plan at www.tn.gov/health
 - New Zealand business planning guide (link in state plan)

Business Planning: Critical Operations

- **Define core operations and individuals or skills necessary to keep functioning (cross-train staff as needed)**
- **Define thresholds for cutting back activities as needed as pandemic has remote and later local effects**
- **Define critical inputs to the business and the effects of affected business partners on operations**
- **Network with industry partners where possible to share ideas**

Business Planning: Mitigation

- **Assess and prepare to mitigate impact of supply or distribution network disruptions**
- **Define what would trigger business closure**
- **Prepare for home office options where appropriate**
- **Direct and provide information to help staff to prepare themselves and their families**
- **Draft policies to accommodate flexibility needed in personnel management**

Business Planning: Protecting health of employees and customers

- **Hand hygiene (alcohol-based or soap)**
 - Post reminders in newsletters, emails, posters
- **Tissues**
- **Cleaning environmental surfaces**
- **Masks?**
 - Definitely useful on a sick person to prevent spread
 - No good evidence for benefit to the well
 - N-95 respirators not likely to provide additional benefit over ordinary masks in untrained persons outside certain healthcare settings

Business Planning: Protecting health of employees and customers

- **Rely on CDC and Health Department updates**
- **Employees who are ill should stay home or will risk infecting co-workers and clients**
 - **Sick leave policy adjustments during pandemic**
 - **Employers could use a call-in screening form in New Zealand plan**
- **Recovered staff develop immunity, are unlikely to fall ill again and should be encouraged to return to work**

Sample Policy (New Zealand Plan)

INFLUENZA NOTIFICATION

Influenza is a contagious disease. There is currently an increase in the numbers of people in New Zealand with influenza. In order to reduce the spread of influenza in this workplace, the following is required of everybody:

DO NOT COME TO WORK if you have:

- chills, shivering and a fever (temperature $>38^{\circ}\text{C}$)
- onset of muscle aches and pains
- sore throat
- dry cough
- trouble breathing
- sneezing
- stuffy or runny nose
- tiredness.

If some of the above apply to you, please go home and wait until you have recovered before returning to work.

If you have recently arrived from overseas or returned from overseas, please ask to speak to the Influenza Manager (see below)

If you start to feel ill at work, **DO NOT** leave your work area

Call your Influenza Manager Ext.....

Plans need to be useful and realistic

- **Business planners should understand and coordinate with local and state preparedness plans**
- **Participate in community preparedness activities as appropriate**
- **Periodically test components of business contingency plans – untested plans are rarely used in real disasters**

Conclusions

- **Influenza periodically causes pandemics**
- **Unanswered questions remain**
 - **Legal liability issues**
 - **Sick leave (development of standard policy recommendations)**
- **Effective preparation and response will reduce impact of a pandemic on business**
- **Questions? Kelly.moore@state.tn.us**